

Sophie Taddeo

Conservation Scientist, Chicago Botanic Garden
Adjunct Assistant Professor, Northwestern University
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EDUCATION

- 2019 Ph.D. in Environmental Planning, University of California — Berkeley
Remote sensing tools for large-scale monitoring of vegetation dynamics in restored wetlands
Advisor: Iryna Dronova
- 2011 M.Sc. in Plant Sciences, McGill University
Spatially explicit tools to assess risks of invasion by common reed (*Phragmites australis*) in protected wetlands
Advisor: Sylvie de Blois
- 2008 B.Sc. in Environmental Geography, Université de Montréal

ACADEMIC APPOINTMENTS

- 2020- Conservation Scientist
Chicago Botanic Garden
- 2019-2020 Postdoctoral Research Associate
University of California — Berkeley

PUBLICATIONS

- Taddeo S**, Dronova I (2020) Landscape metrics of post-restoration vegetation dynamics in wetland ecosystems. *Landscape Ecology* **35**:275–292.
- Taddeo S**, Dronova I, Depsky N (2019) Spectral vegetation indices of wetland greenness: Responses to vegetation structure, composition, and spatial distribution. *Remote Sensing of Environment* **234**:111467.
- Taddeo S**, Dronova I, Harris K (2019) The potential of satellite greenness to predict plant diversity among wetland types, ecoregions, and disturbance levels. *Ecological Applications* **29**(7).
- Taddeo S**, Dronova I (2019) Geospatial tools for the large-scale monitoring of wetlands in the San Francisco estuary: Opportunities and challenges. *San Francisco Estuary and Watershed Science* **17**(2)
- Taddeo S**, Dronova I (2018) Indicators of vegetation development in restored wetlands. *Ecological Indicators* **94**:454–467.
- Dronova I, **Taddeo S** (2016) Canopy leaf area index in non-forested marshes of the California Delta. *Wetlands* **36**:705–716.
- Taddeo S**, De Blois S (2012) Coexistence of introduced and native common reed (*Phragmites australis*) in freshwater wetlands. *Ecoscience* **19**:99–105.

AWARDS AND FELLOWSHIPS

Fellowships

2020-2021. Illinois-Indiana Faculty Scholars Program, ~\$12,000

2015-2017. Delta Science Fellowship. Delta Stewardship Council. California Sea Grant. Phenological Indices of Wetland Recovery in Working Landscapes of the Sacramento-San Joaquin Delta. ~\$150,000

Awards

2019. Outstanding Graduate Student Instructor Award, University of California — Berkeley

2018. Farrand Award, University of California — Berkeley

2015. Student Travel Award, United States Chapter of the International Association for Landscape Ecology

2010. Student Excellence Prize, Quebec Center for Biodiversity Science

2010. Graduate Research Enhancement and Travel Awards, McGill University

2009. Walter M. Stewart Scholarship in Agriculture, McGill University

SELECTED PRESENTATIONS

Contributed talks

Taddeo S, Dronova I, Harris K (2019). Satellite-based Spectral Greenness Predicts Plant Diversity Across Wetland Types and Disturbance Levels. Annual Meeting of the North-American Association of Landscape Ecology, Fort Collins, Colorado.

Taddeo S, Dronova I, Harris K (2019). Satellite-based Spectral Greenness Predicts Plant Diversity Across Wetland Types and Disturbance Levels. Society of Wetland Scientists, Baltimore, Maryland.

Taddeo S, Dronova I (2018). Leveraging Free Remote Sensing Data for the Landscape-Scale Assessment of Vegetation Dynamics in Restored Wetlands.

Taddeo S, Dronova I (2018). Spatial Indicators of Post-Restoration Recovery in Wetland Ecosystems. 2018 Annual Meeting of the American Association of American Geographers. New Orleans, Louisiana.

Taddeo S, Dronova I (2017). Leveraging Public Aerial Image Datasets to Characterize Vegetation Dynamics in Restored Wetlands and their Response to Site Design and Landscape Context. 102th Annual Meeting of the Ecology Society of America. Portland, Oregon.

Taddeo S, Dronova I (2017). Leveraging Public Aerial Image Datasets to Monitor Vegetation Dynamics in Wetland Ecosystems. 2017 Annual Meeting of the Society of Wetland Scientists. San Juan, Puerto Rico.

Taddeo S, Dronova I (2017). Phenological Indicators of Vegetation Recovery in Wetland Ecosystems. Fall Meeting of the American Geophysical Union. New Orleans, Louisiana.

Contributed posters

Taddeo S, Dronova I (2018). Phenological Indicators of Vegetation Recovery in Wetland Ecosystems. Annual Meeting of the American Geophysical Union. Washington D.C.

Taddeo S, Dronova I (2017). Leveraging Public Aerial Image Datasets to Evaluate Wetland Restoration Progress. California Society for Ecological Restoration 2017 Annual Meeting. Davis, California.

Taddeo S, Dronova I (2017). Phenological Indicators of Vegetation Recovery in Wetland Ecosystems. 2017 Annual Meeting of the American Geophysical Union. New Orleans, Louisiana.

Taddeo S, Dronova I (2017). Phenological Indicators of Wetland Recovery in the Sacramento-San Joaquin Delta. 2017 State of the Estuary Conference. Oakland, California.

RESEARCH EXPERIENCE

2018-2019 Graduate Student Researcher
University of California — Berkeley

Researcher for a NASA-funded project using vegetation indices derived from satellite imagery (Landsat and MODIS) to monitor plant diversity in wetlands of the conterminous United States.

2016-2018 Graduate Student Researcher
University of California — Berkeley

Researcher for a California Sea Grant-funded project using field observations and satellite imagery to monitor restoration progress in wetlands of the Sacramento-San Joaquin Delta.

2010-2011 Research Assistant
McGill University

Researcher for a project assessing current and future invasion risks in Quebec, Canada for a set of exotic species.

TEACHING AND MENTORING

Principal instructor

2019. Ecological Analysis, University of California —Berkeley

2016. Ecological Analysis, University of California —Berkeley

Guest lecturer

2018. Applied Remote Sensing, University of California —Berkeley

2018. Landscape Architecture and Environmental Planning Colloquium, University of California — Berkeley

2017. Landscape Architecture and Environmental Planning Colloquium, University of California — Berkeley

Graduate student instructor

2016. Introduction to GIS and City Planning, University of California — Berkeley

2015. Ecological Analysis, University of California — Berkeley

2010. Evolving Earth, McGill University

2010. Global Environment, McGill University

2009. Evolving Earth, McGill University

Undergraduate student mentoring

2017 - 2018. Undergraduate Research Apprentice Program, University of California — Berkeley

2017. Senior Research Seminar in Environmental Sciences, University of California — Berkeley

2016. Student Mentoring and Research Teams Program, University of California — Berkeley

SERVICE

Manuscript Reviewer

2020. Sensors

2020. Science of the Total Environment

2019 - 2020. Journal of Environmental Management

2019. Restoration Ecology

2019 - 2020. Wetland Ecology and Management

2016 - 2020. Aquatic Botany

PROFESSIONAL EXPERIENCE

2013-2014 Freshwater Analyst,
WWF-Canada, Toronto, Ontario

2012-2013 Government of Quebec Intern
Great Lakes Commission, Ann Arbor, Michigan

2011-2012 Geomatics and Stewardship Assistant
Nature Conservancy of Canada, Montreal, Quebec